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- II. OCHERK RAZVITIYA VYSSHEY NERVNOY DEYATEL'NOSTI I REBERKA RANNEGO VOZRASTA by N I Kasatkin (Medgiz, Moscow, 1951 98 pp)
- III. BOLEZNI PECHENI I ZHELCHNYKH PUTEV I DETEV by M S Maslov (Medgiz, 1951, 164 pp)
- IV. KLINICHESKAYA SIMPTOMATOLOGIYA OSTRYKH VNUTRENNICH ZABOLEVANIY by A N Fryukov (Medgiz, Moscow, 1952, 244 pp)
- V. KLINICHESKIYE ISSLEDOVANIYA by V M Kernig (Medgiz, 1951, 163 pages)
- VI. LUCHSHIYE NAUCHNIYE RABOTY ASPIRANTOV (Medgiz, 1951, 266 pp) 7

I. PERELIVANIYE KROVI

1. This is a collective work written by many authors concerned with all aspects of blood transfusion. Most of the authors are unknown to me and I believe that probably most of them are younger people who started their careers either just before or just after World War II.
2. The first chapter is devoted to a history of blood transfusion. It discusses mostly the works of old Russian and later Soviet scientists in the field but names of foreign authors like Landstein, Janski and Moss are also quoted.

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3. The second chapter deals with blood transfusion organization in the USSR and especially the activities of the Central Institute of Hematology and Blood Transfusion in Moscow. Nothing particularly outstanding is discussed.
4. The third chapter deals with questions of isoserology: blood types, agglutination etc. It is a good description of the contemporary level of knowledge in this field. I was interested in this connection to notice that the most recent great achievement in this field, namely the role of the rhesus factor, is discussed in detail. US publications of 1946-1947 are quoted. The last part of the chapter deals with practical matters such as the preparation of standard serums, the examination of blood types in patients and compatibility tests. These are discussed very thoroughly and it appears to me that the methods used in USSR do not differ from those of other countries.
5. The fourth chapter deals with the organization of blood donors and contains the only piece of propaganda in the book which is a statement that the blood donor situation in the US and the UK is merely a method of exploiting the poor oppressed workers. This point is however not belabored and is stated in only two or three sentences. The balance of the chapter discusses the qualifications for donorship and describes in detail the health standards to be met by such donors, i.e. what diseases disqualify them etc. I found nothing unusual.
6. The fifth chapter is a discussion of various methods and techniques of blood transfusion. I was somewhat surprised on reading this chapter to see that a great deal of space is devoted to a discussion of the different methods of direct transfusion. I believe that this method is considered obsolete not only in the US but in every other country including USSR. I recall incidentally seeing direct transfusion used only once in the USSR, even as long ago as the 1930's. Naturally enough, more attention is given to methods of indirect transfusion. In this connection the chapter first discusses blood stabilizers, including citrates, magnesium sulfate, salicylates, heparin and synthetic anti-thrombin (sinartrin). Sinartrin may possibly be the same as the US dicumerol. Following this discussion the chapter furnishes a detailed description of the vessels used for the collection of blood. I believe that comparable vessels in the US are much more advanced than those described which are somewhat primitive. Although standard blood transfusion techniques which are similar to those in the US are described, a number of special techniques are also discussed. For example, on page 134 the technique of arterial transfusion is discussed and a drawing illustrating its apparatus is supplied. Also furnished are descriptions of other special techniques such as intra-cardial blood transfusion and transfusion using the inferior concha of the nose. The latter technique was new to me but the author of this chapter says that drugs may also be administered in this way. Intrapleural and intra-peritoneal transfusions are described but in the opinion of the author these two techniques are not advisable. Transfusion through the bone marrow of the sternum, the iliac bone and the tarsus is described but this technique, at least as far as the iliac bone is concerned, is, I believe, used in the US. I was very interested to see that the Soviets are apparently using a method of venous transfusion utilizing massive amounts of blood (500 - 1,000 cc) transfused in a very short time, in addition to the conventional methods in use in the US which transfuse perhaps 500 cc drop by drop over one to two hours. Finally the chapter mentions methods of transfusing defibrinated blood but this is regarded only as a substitute method.
7. Chapter six is on blood preservation and this question is discussed thoroughly from both the theoretical and the practical points of view. Such factors as blood count, the osmotic fragility of red cells, biochemical characteristics and bacteriological findings are all discussed

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in a way that is perfectly acceptable by US standards. On page 189 the author furnishes a list of various carbohydrate-free solutions which permit the preservation of blood for ten to fifteen days. On page 191 is furnished a citrate/glucose formula which preserves blood for 18 to 25 days and page 192 describes a glucose/heparin formula which is less useful as it preserves blood for only 15 days. The next two pages describe various modifications of this glucose citrate solution. The actual physical technique of blood preservation is discussed very thoroughly and many drawings are supplied. The chapter describes the technique rather like a manufacturing operation under aseptic conditions. It even considers such details as how to label blood containers and how to transport blood in special isothermic boxes. In the latter part of the chapter the question of the transfusion of placental blood is discussed. On page 245 the statement is made that up to 1941, ten thousand transfusions of this kind had been performed in the USSR. The method of collecting placental blood is also described. Finally in this chapter the question of transfusion of blood from cadavers is discussed. Apparently this method is not popular in the USSR but nevertheless, according to the author, it has been used in five thousand cases.

8. Chapter seven deals with blood substitutes and fractions and the author describes the transfusion of plasma, serum and erythrocytes in mass. Special equipment described includes a Seitz filter, Rosenberg apparatus for the defibrination of plasma, and similar apparatus of Rutberg. The use of dried serum and plasma is discussed but only as an experimental problem and apparently this technique has not been perfected in the USSR. The second part of the chapter deals with artificial substitutes and mentions, in addition to such well-known substitutes as the Ringer-Locke solution, a number of Soviet formulas of this kind. Also furnished are a number of formulas of so-called anti-shock solutions such as sero-transfusin. These I believe are similar to some used in Germany, although the names of course are different.
9. Chapter eight discusses briefly factors which should be considered before accepting blood donors. These factors include such things as acute allergic reactions, vascular thrombosis or acute embolic states, acute hepatitis and acute nephritis. The conditions described, however, are the same as those in any country.
10. Chapter nine discusses at great length the therapeutic effect of blood transfusions but I did not find anything particularly new presented. It is a very good description of the effects of transfusions which I believe could have been written by any specialist in this field in any country. I should perhaps mention that the chapter does state that the transfusion of only a small quantity (25 to 50cc) of incompatible blood serves to stimulate the body. This idea is, however, treated very cautiously. It is, of course, one of the theories of Bogomolets although he is not mentioned by name.
11. Chapter ten discusses complications observed in blood transfusions, their prevention and treatment. This is merely a routine description of this subject.
12. Generally speaking, I found this book to be an excellent treatment of the subject which could have been written in any country. It is designed for physicians and senior students. It is interesting that with the one exception mentioned above, no political propaganda was contained in the book. In line with Soviet custom few statistics are furnished and none dating after World War II. I have the impression that the Soviets use blood transfusions before and after operations less than is customary in the US. This may, however, be due more to a smaller supply of available blood than to a difference in medical opinion as regards the effectiveness of blood transfusion.

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II. OCHERK RAZVITIYA VYSHEY NERVNOY DEYATEL'NOSTI I REBENKA RANNEGO VOZRASTA

13. This is an essay on the development of central nervous activity in infants and babies. Although it is poorly edited, the book impressed me very favorably. The author makes no political statements but furnishes a very valuable study on Soviet investigations in the field. As might be expected, investigative methods proposed by Pavlov receive particular emphasis in the book. I was somewhat surprised, however, to see that the author gives considerable attention also to the works of Bechterev, who died in 1925. This scientist and his school were definitely not in favor with the Soviet authorities in the 1920's. In spite of this, however, the author furnishes a description of his ideas on the ontological aspects of research. The author appears to be very familiar with the latest methods of encephalography and also has used the experimental procedure called chronaxia. It would take me too long to summarize the entire book because of the wealth of detail it contains. I should mention, however, that it furnishes many interesting postulates without being dogmatic. As a book of science it is very valuable and if translated into English would I am sure find many readers.

III. BOLEZNI PECHENI I ZHELCHNYKH PUTY I DETEY

14. This booklet is a discussion of liver and bile duct diseases in children. I had previously heard of the author who was a very prominent pediatrician in St Petersburg when I was a young man. He was well known not so much as a practitioner but as a theoretician doing research on the physiology and pathology of children.

I recall being deeply impressed not only with his ideas and methods of approach in his own scientific field but also by his general erudition. He was familiar with all the literature from all countries and I remember he quoted Indian, South African and authors from other out-of-the-way places. Maslov is now [] in his late 70's.

15. This booklet, which is one of a series of handbooks for the medical practitioner covering all branches of medicine, is a very good treatment of the subject but quotes only Soviet contributions to the field. This surprised me because of Maslov's familiarity with the work of so many non-Soviet scientists. His failure to mention foreign scientists was of course probably due to his somewhat uncertain political position. I noted also that he attacks US experiments on virus hepatitis because it involved human volunteer subjects, in spite of the fact that [] he has used human experimental subjects a great many times during his scientific career. In the book he puts considerable emphasis on the biochemical characteristics of various diseases in this field and describes many unusual methods of examination which are very valuable. I should mention, however, that he does not mention two simple and effective tests of liver function used in the US and these are probably, therefore, not used in the USSR. These are cephalin, flocculation and thymol turbidity. Other common tests in this general field, however, are described in full. I was also interested to see that US methods for the treatment of cirrhosis of the liver i.e. with drugs and high protein diet, are not reflected in this book. Generally speaking, however, this is a good competent treatment of the subject. It could probably best be described as a popular book for medical practitioners.

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IV. KLINICHESKAYA SIMPTOMATOLOGIYA OSTRYKH VNUITRENNIKH ZABOLEVANIY

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16. Kryukov is an old professor who is now [redacted] about in his 70's who specialized in hematology. Professionally I would describe him as a star of the second or third degree. I recall that he was in disfavor in the 1920's or 1930's and could not practice in Moscow or Leningrad and had to go to Tashkent. This book has no bibliography and does not cite the works of any other authors. It reflects only the clinical experience of the author. It is, nevertheless, a valuable contribution and could have been written even in the US. Its subject is the clinical symptomatology of acute disorders of the internal organs and describes the causes of such things as bleeding, pains, dyspnea, comatose states, vomiting, diarrhea etc. The author tries to base his conclusions solely on clinical observations at the bed of the patient. This book, it seems to me, is very valuable since contemporary clinicians are to a certain point spoiled by the advances of modern medicine having as they do every kind of mechanical device to assist them in their diagnoses and many have lost the art of clinical observation.

V. KLINICHESKIYE ISSLEDOVANIYA

17. Following World War II, the Communists initiated in the USSR a program for publishing the works of prominent Russian physicians of the past. This was probably a good idea since many of the pre-revolution Russian medical people made significant contributions. Undoubtedly, however, the reason for the establishment of this program was its propaganda value, and it was probably designed to build up the self-confidence of Soviet physicians. This book is one of this series. Since Kernig, the author, died before the October Revolution, this particular book is probably only of historical interest. Kernig's best-known contribution was in the study of meningitis and "Kernig's sign" is still in common usage as an indication of meningitis. Kernig was an ardent opponent of Bolshevism.

VI. LUCHSHIYE NAUCHNYYE RABOTY ASPIRANTOV

18. The title of this book means the best scientific works of the aspirants. In order to understand the significance of this title it is necessary also to understand the Soviet system of medical education. Anyone may become a "physician" after five years on a medical faculty, one year of internship and after passing state examinations, if his work during this period has been well done. Anyone, however, who wishes to become a leading staff physician or a teacher of medicine must obtain one of two additional scientific degrees: candidate of medicine or doctor of medicine. Theoretically no one can be a professor of medicine without the doctor's degree. "Aspirants" are those attempting to obtain these degrees. They receive grants for three years of study and are required to write an original thesis. If this work is accepted they then become "candidates of medicine". This book contains 13 such theses prepared by aspirants in the University of Moscow and are considered to be the best theses prepared during a certain period presumably one year. With the exception of only two, all are good contributions and well done. They concern themselves, however, only with very, very specific problems such as "nerves of the gastric arteries", "innervation of the pulmonary blood vessels", "Allergines" etc. It would be impossible for me to describe them all and I do not think it would serve any useful purpose. None of the theses have any immediate practical importance. I should mention that the worst theses are the last two in the book which are concerned with legal medicine or more particularly legal psychiatry. Their titles are as follows: (a) Changes of Mental Status in Arteriosclerosis and their Legal Psychiatric evaluation; (b) Epileptic dementia. Both of these are quite bad and were obviously written by Communists.

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